



chain nodes :

13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12

chain bonds :

2-14 5-9 12-13 13-15 14-17 15-16 16-19 17-18 18-20 19-21 20-22  
21-24 21-26 22-23 22-25 25-28 26-27

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

exact/norm bonds :

2-14 12-13 19-21 20-22 21-24 22-23

exact bonds :

5-9 13-15 14-17 15-16 16-19 17-18 18-20 21-26 22-25 25-28 26-27

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom  
10:Atom 11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS  
18:CLASS 19:CLASS 20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS  
25:CLASS 26:CLASS 27:CLASS 28:CLASS

L6 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2004:220584 CAPLUS  
DN 140:278516  
TI Image display system  
IN Ozeki, Masao; Isshiki, Masanobu; Tahara, Shinya; Suzuki, Toshihiko  
PA Optrex Corporation, Japan  
SO PCT Int. Appl., 89 pp.  
CODEN: PIXXD2

DT Patent  
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004023200	A1	20040318	WO 2003-JP11264	20030903
	W: CN, KR, US				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
	JP 2004184979	A2	20040702	JP 2003-310478	20030902
PRAI	JP 2002-258234	A	20020903		
	JP 2002-337063	A	20021120		

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2001:28843 CAPLUS  
DN 134:93429  
TI Liquid crystal element and its production method  
IN Tawara, Shinya; Niiyama, Satoshi  
PA Optrex K. K., Japan; Asahi Glass Co., Ltd.  
SO Jpn. Kokai Tokkyo Koho, 6 pp.  
CODEN: JKXXAF

DT Patent  
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001004986	A2	20010112	JP 1999-175221	19990622
PRAI	JP 1999-175221		19990622		

L6 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2000:277416 CAPLUS  
DN 132:286429  
TI Liquid crystal optical device and its manufacture  
IN Tawara, Shinya; Arayama, Satoshi  
PA Asahi Glass Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 4 pp.  
CODEN: JKXXAF

DT Patent  
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000122045	A2	20000428	JP 1998-298623	19981020
PRAI	JP 1998-298623		19981020		

L6 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2000:272059 CAPLUS  
DN 132:315906  
TI Method for manufacture of liquid crystal optical device  
IN Arayama, Satoshi; Tahara, Shinya  
PA Asahi Glass Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 5 pp.  
CODEN: JKXXAF

DT Patent  
LA Japanese  
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000119655	A2	20000425	JP 1998-298620	19981020
	WO 2000023539	A1	20000427	WO 1999-JP5765	19991019
	W: US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 1154006	A1	20011114	EP 1999-947972	19991019
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	US 6723393	B1	20040420	US 2001-807425	20010703
	US 2004161549	A1	20040819	US 2004-780643	20040219
PRAI	JP 1998-298620	A	19981020		
	JP 1998-298621	A	19981020		
	JP 1998-298624	A	19981020		
	WO 1999-JP5765	W	19991019		
	US 2001-807425	A1	20010703		

L6 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2000:267310 CAPLUS  
DN 132:301042  
TI Liquid crystal optical device and its manufacture  
IN Arayama, Satoshi; Tahara, Shinya  
PA Asahi Glass Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 8 pp.  
CODEN: JKXXAF

DT Patent  
LA Japanese  
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000119656	A2	20000425	JP 1998-298624	19981020
	WO 2000023539	A1	20000427	WO 1999-JP5765	19991019
	W: US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 1154006	A1	20011114	EP 1999-947972	19991019
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	US 6723393	B1	20040420	US 2001-807425	20010703
	US 2004161549	A1	20040819	US 2004-780643	20040219
PRAI	JP 1998-298620	A	19981020		
	JP 1998-298621	A	19981020		
	JP 1998-298624	A	19981020		
	WO 1999-JP5765	W	19991019		
	US 2001-807425	A1	20010703		

OS MARPAT 132:301042

L6 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 1995:723451 CAPLUS  
DN 123:156586  
TI Polymer-dispersed liquid crystal display device  
IN Kobayashi, Hidekazu; Chino, Eiji; Yazaki, Masayuki; Tsucha, Yutaka  
PA Seiko Epson Corp, Japan  
SO Jpn. Kokai Tokkyo Koho, 6 pp.  
CODEN: JKXXAF

DT Patent  
LA Japanese  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 07140447 A2 19950602 JP 1993-287006 19931116  
PRAI JP 1993-287006 19931116

L6 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 1993:102646 CAPLUS  
DN 118:102646  
TI Crosslinked liquid crystal polymers from  
liquid crystal monomers: synthesis and mechanical  
properties  
AU Litt, Morton H.; Whang, Wha Tzong; Yen, Kung Ti; Qian, Xue Jun  
CS Dep. Macromol. Sci., Case West. Reserve Univ., Cleveland, OH, 44106, USA  
SO Journal of Polymer Science, Part A: Polymer Chemistry (1993), 31(1),  
183-91  
CODEN: JPACEC; ISSN: 0887-624X  
DT Journal  
LA English

L6 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 1991:409618 CAPLUS  
DN 115:9618  
TI Polymerization of liquid crystalline monomers  
IN Litt, Morton H.  
PA Edison Polymer Innovation Corp. (EPIC), USA  
SO Eur. Pat. Appl., 14 pp.  
CODEN: EPXXDW  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 405713	A1	19910102	EP 1990-303821	19900410
	R: BE, DE, FR, GB, NL				
	US 5078910	A	19920107	US 1989-369205	19890620
	CA 2014966	AA	19901220	CA 1990-2014966	19900419
	JP 03041043	A2	19910221	JP 1990-160063	19900620
PRAI	US 1989-369205	A	19890620		

L6 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 1990:180044 CAPLUS  
DN 112:180044  
TI Polymerizable diacrylates  
IN Uriyu, Toshiyuki; Ando, Masayuki  
PA Dai Nippon Printing Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 4 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 01272551	A2	19891031	JP 1988-99885	19880422
PRAI	JP 1988-99885		19880422		

L6 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 1990:78048 CAPLUS  
DN 112:78048  
TI Crosslinked liquid crystal polymers from  
liquid crystal monomers  
AU Litt, Morton H.; Yen, Kung Ti; Biswas, Atanu; Whang, Wha Tzong  
CS Dep. Macromol. Sci., Case Western Reserve Univ., Cleveland, OH, 44106, USA  
SO Polymer Preprints (American Chemical Society, Division of Polymer  
Chemistry) (1989), 30(2), 470-1  
CODEN: ACPPAY; ISSN: 0032-3934  
DT Journal